

Claim Amendments

Please amend claims 1, 15 and 22-30 as follows:

1. (currently amended) A method ~~of editing a bitstream carrying video data indicative of a video sequence, said method~~ comprising:

acquiring from ~~[[the]]~~ a bitstream data indicative of transform coefficients of at least part of ~~[[the]]~~ a video sequence, wherein the bitstream comprises video data indicative of the video sequence; and

modifying the acquired data in the transform domain for providing modified data in a modified bitstream ~~in order~~ to achieve a video effect in said at least part of the video sequence, wherein motion compensation is used in compression of the video sequence.

2. (original) The method of claim 1, wherein said acquiring comprises:

decoding the bitstream for obtaining a plurality of quantized transform coefficients; and

converting the quantized transform coefficients by inverse quantization for providing the transform coefficients.

3. (original) The method of claim 2, wherein the modified data contain a plurality of quantized modified transform coefficients, and said modifying comprises changing the transform coefficients for providing a plurality of modified transform coefficients, said method further comprising:

quantizing the modified transform coefficients for providing a plurality of quantized modified transform coefficients in the modified bitstream.

4. (original) The method of claim 1, further comprising:

obtaining further data indicative of a plurality of further transform coefficients, wherein said modifying comprises

combining the further data with the acquired data for providing the modified data.

5. (original) The method of claim 4, wherein said combining comprises:

multiplying the further data by a first weighting parameter for providing a first weighted data;

multiplying the acquired data by a second weighting parameter for providing a second weighted data; and

summing the first weighted data and the second weighted data for providing the further data.

6. (original) The method of claim 5, wherein one or both of the first and second weighting parameters are adjusted to achieve a blending effect.

7. (original) The method of claim 5, wherein one or both of the first and second weighting parameters are adjusted to achieve a sliding transitional effect.

8. (original) The method of claim 4, wherein the further data is indicative of the further transform coefficients of a different part of the video sequence.

9. (original) The method of claim 4, wherein the further data is obtained from a different bitstream.

10. (original) The method of claim 4, wherein the further data is obtained from a memory device via a transform operation.

11. (original) The method of claim 1, further comprising:

decoding the bitstream for obtaining a plurality of quantized transform coefficients; and
converting the quantized transform coefficient in an inverse quantization operation for obtaining a plurality of dequantized transform coefficients for use in said modifying.

12. (original) The method of claim 11, further comprising:

inversely transforming the dequantized transform coefficients for obtaining information indicative of a prediction error;

combining the prediction error with motion compensation information in the video data for providing further video data indicative of a reference frame;
transforming the further video data for providing transformed reference data; and
combining the transform reference data with the transform coefficient in said modifying.

13. (original) The method of claim 12, further comprising:

obtaining a plurality of further transform coefficients from a memory device via a transform operation; and
combining the further transform coefficients with the transform coefficient in said modifying.

14. (original) The method of claim 12, further comprising:

obtaining a plurality of further transform coefficients from a different bitstream; and
combining the further transform coefficients with the transform coefficients in said modifying.

15. (currently amended) An apparatus ~~A video editing device for editing a bitstream carrying video data indicative of a video sequence, said device~~ comprising:

an acquiring module, ~~responsive to the~~ configured for acquiring data from a bitstream carrying video data of a video sequence, for acquiring the data indicative of transform coefficients of at least part of the video sequence, wherein motion compensation is used in compression of the video sequence; and

a modification module, responsive to the acquired data, for changing the transform coefficients in the transform domain for providing modified data in a modified bitstream in order to achieve a video effect in said at least part of the video sequence.

16. (original) The editing device of claim 15, wherein the acquiring module comprises:

a decoding module, responsive to the bitstream, for obtaining a plurality of quantized transform coefficients; and

an inverse quantization module, responsive to the quantized transform coefficients, for providing the transform coefficients.

17. (original) The editing device of claim 16, wherein the transform coefficients are changed in the transform domain to become modified transform coefficients by the modification module, said editing device further comprising:

a quantization module for quantizing the modified transform coefficients for providing a plurality of quantized modified transform coefficients in the modified data.

18. (original) The editing device of claim 15, further comprising:

a further acquiring module for obtaining further data indicative of a plurality of further transform coefficients; and

a combination module, for combining the acquired data and the further data for providing the modified data.

19. (original) The editing device of claim 18, wherein the further data is acquired from a memory device via a transform module.

20. (original) The editing device of claim 15, further comprising:

a further acquiring module for obtaining further data indicative of a plurality of further transform coefficients;

an inverse transform module, responsive to the further data, for providing information indicative of a prediction error;

a combination module, responsive to the prediction error and motion compensation information in the video data, for providing reference data indicative of a reference frame; and

a transform module, responsive to the reference data, for providing transformed reference data to the modification module so as to change the transform coefficient based on the transformed reference data.

21. (original) The editing device of claim 20, further comprising:

a further transform module, responsive to additional data in a memory device, for providing transformed additional data to the modification module so as to change the transform coefficients further based on the transformed additional data.

22. (currently amended) A video coding system, comprising:

a decoder; and

an encoder for receiving a bitstream carrying video data indicative of a video sequence, wherein the encoder comprises a video editing device for editing the bitstream, the editing device comprising:

an acquiring module, responsive to the bitstream, for acquiring data indicative of transform coefficients of at least part of the video sequence, wherein motion compensation is used in compression of the video sequence; and

a modification module, responsive to the acquired data, for changing the transform coefficients in the transform domain for providing modified data in a modified bitstream in order to achieve a video effect in said at least part of the video sequence, and

wherein the decoder is operable

in a first mode for reconstructing video from the video data carried in the bitstream, and

in a second mode for reconstructing video from the modified data in the modified bitstream.

23. (currently amended) An electronic device comprising:

~~a video data acquisition~~ means for acquiring a bitstream carrying a video sequence having video data, wherein motion compensation is used in compression of the video sequence; and

~~a video editing device for editing the bitstream to achieve a video effect, the editing device comprising:~~

~~a first module~~ means for obtaining from the bitstream transform coefficients of at least a part of the video sequence;

~~a second module~~ means for modifying the transform coefficients in the transform domain for providing modified transform coefficients in order to achieve a video effect; and

~~a third module~~ means for converting the modified transform coefficients into modified video data in a modified bitstream.

24. (currently amended) A computer readable medium encoded with a software program, the software program ~~software product for use in a video editing device for editing a bitstream carrying video data indicative of a video sequence, said software product~~ comprising:

[[a]] programming code for extracting video data from ~~[[the]]~~ a bitstream comprising a video sequence, the video data indicative of a plurality of transform coefficients of at least part of the video sequence, wherein motion compensation is used in compression of the video sequence; and

[[a]] programming code for modifying the transform coefficients for providing modified data indicative of the modified transform coefficients in order to achieve a video effect.

25. (currently amended) The computer readable medium ~~software product~~ of claim 24, further comprising:

[[a]] programming code for mixing the transform coefficients of said at least part of the video sequence with other transform coefficients.

26. (currently amended) The computer readable medium ~~software product~~ of claim 24, wherein the code for extracting comprises:

[[a]] programming code for decoding the bitstream for obtaining a plurality of quantized transform coefficients; and

[[a]] programming code for converting the quantized transform coefficients by inverse quantization for providing the transform coefficients.

27. (currently amended) The computer readable medium of claim 26 ~~software product of claim of 26~~, wherein the code for modifying comprises:

[[a]] programming code for changing the transform coefficients for providing a plurality of modified transform coefficients, said software product further comprising:

[[a]] programming code for quantizing the modified transform coefficients for providing a plurality of quantized modified transform coefficients in a modified bitstream.

28. (currently amended) The computer readable medium ~~software-product~~ of claim 25, wherein the code for mixing ~~comprises~~ comprises:

[[a]] programming code for multiplying the transform coefficients by a first weighting parameter for providing a first weighted data, and multiplying the other transform coefficients by a second weighting parameter for providing a second weighted data; and

[[a]] programming code for summing the first weighted data with the second weighted data for providing the modified data.

29. (currently amended) The computer readable medium ~~software-product~~ of claim 25, further comprising:

[[a]] programming code for extracting stored data from a memory for providing further data; and

[[a]] programming code for transforming the further data for providing the other transform coefficients.

30. (currently amended) The computer readable medium ~~software-product~~ of claim 24, further comprising:

[[a]] programming code for decoding the bitstream for obtaining a plurality of quantized transform coefficients; and

[[a]] programming code for converting the quantized transform coefficient in an inverse quantization operation for obtaining a plurality of the dequantized transform coefficients;

[[a]] programming code for inversely transforming the dequantized transform coefficients for obtaining information indicative of a prediction error;

[[a]] programming code for combining the prediction error with motion compensation information in the video data for providing further video data indicative of a reference frame;

[[a]] programming code for transforming the further video data for providing transformed reference data; and

[[a]] programming code for mixing the transform reference data with the transform coefficient for providing the modified data.